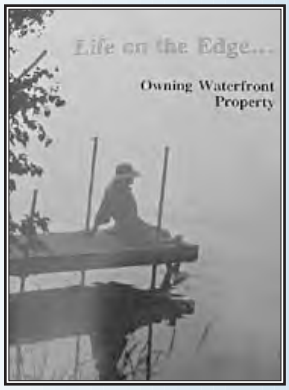
In the case of sediment or algae having a negative impact on your lake, you may want to apply for a Lake Planning Grant. Your lake association can use the grant to prepare a long-term management plan. For more information on Applying for a Lake Planning Grant contact your Self-Help regional coordinator or a UW-Extension lake specialist. The Wisconsin DNR website also provides excellent information on lake grants at **dnr.wi.gov/org/water/fhp/lakes/lkgrants.htm**.

If you don't have a lake association, form one. Lake associations are organizations of individuals who own land on or near a lake. Dealing with the broad range of issues and concerns that face our lakes can be overwhelming for one person. Working as an organized group that shares a common goal can make even the most difficult problems easy. For more information on forming a lake association or other ways to organize, please contact: Lake Specialist, UW-Extension, College of Natural Resources, UW-Stevens Point, Stevens Point, WI 54881-3897. Or, visit **www.uwsp.edu/cnr/uwexlakes/organizations/**.

If you already part of a lake association, you can share your data by doing a presentation or writing an article for the newsletter.

The best way to help solve your lake's problems is through education. Try planning a lake fair or event. A lake fair is a good way to help lake property owners and users become involved with lake issues. A lake fair is an educational and social event that blends a sense of discovery and entertainment. These events provide an opportunity for participants to get hands-on experience, talk with lake experts in an informal setting, meet lake neighbors, and build relationships. For more information on organizing a lake fair, please contact: Lake Specialist, UW-Extension, College of Natural Resources, UW-Stevens Point, Stevens Point, WI 54881.

Another great opportunity to further your limnology skills is to attend the Lake Leader Institute. The Institute's seminars are designed to stretch the minds by exploring new ideas about lakes management and the human use of lakes. The Institute also seeks to develop networks to share experiences and to encourage participants to learn from each other. The core curriculum is offered every other year. For more information on the Lake Leader Institute, please visit **www.uwsp.edu/cnr/uwexlakes/lakeleaders/**.




**FOR MORE INFORMATION ON HOW TO PROTECT AND ENHANCE YOUR LAKES,**
**obtain a copy of**

***Life on the Edge… Owning Waterfront Property.***

**The 22 chapters give an overview of various topics such as living with wildlife, shore savers, or plant control. Copies are $10 each and can be ordered online at www.uwsp.edu/cnr/uwexlakes/publications/edge/default.asp or by calling (715) 346-2116.**


*Aquatic weevil feeding on Eurasion water-milfoil.*
(*Photo provided with permission by Cornell University* **www.forestryimages.org**).

## What if My Lake Has Invasive Species?

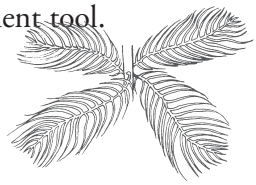
### *Eurasian Water-milfoil*

Early detection of Eurasian water-milfoil growth is critical in stopping the plant from becoming a widespread problem. The best chance to halt these non-native invaders is when they first appear on the scene. Eurasian water-milfoil often appears near boat landings, high use areas (fishing hot spots), and at disturbed sites.

New colonies are best removed before they expand. Hand pulling and removal from the water is a simple and effective control method for small areas. Harvesting, raking, or screening the bottom also works well. Eurasian water-milfoil can be effectively treated with selected chemicals early in the summer before plants flower. A permit is required from the Wisconsin DNR for chemical treatment, mechanical harvesting, or bottom screening. Whole-lake herbicide treatment is not generally permitted because of the potential to disrupt lake ecosystems by eliminating both invasive and beneficial native plants.

For lakes dominated with beds of Eurasian water-milfoil, control efforts must be focused on reducing its spread. Mechanical harvesting can open areas for boating and swimming. Harvesting encourages growth of native plants while removing Eurasian water-milfoil canopies that limit native plant growth.

Biological control of Eurasian water-milfoil is still uncertain. A small aquatic weevil (*Euhrychiopsis lecontei*) is known to feed on Eurasian water-milfoil and actually prefers this plant over other plants. Fortunately, weevils are found in many Wisconsin lakes. To locate one, look in Eurasian water-milfoil stems for signs of damage. The small holes or weak spots in the stems point to weevil damage. These holes, caused by the weevils, allow water to enter the stem, expose the plant to bacterial infection, and decrease the plant's buoyancy. As a result, the plant will drop lower into the water column and cannot spread out on the surface. Over time, weevils may be able to impact populations of Eurasian water-milfoil, but complete eradication is unlikely. Additional research and development is needed before biological control with weevils can be considered an effective management tool.



***Purple Loosestrife***

There are several methods of controlling purple loosestrife, depending on how widespread the problem is. If there is a large area dominated by the plant, you might want to consider releasing beetles that eat the plant. You can find out more on purple loosestrife and how to control it by visiting the Wisconsin DNR website at **dnr.wi.gov/invasives** or by contacting Brock Woods at (608) 221-6349.

***Zebra Mussel***

Whenever you leave a body of water transporting a boat, drain all bilge water, live wells, and bait buckets before leaving areas infested with zebra mussels. Do not transport leftover bait from infested waterways to other waters. Thoroughly inspect your boat's hull, outdrive, trim plates, trolling plates, prop guards, transducers, trailers, and other parts exposed to infested waters. If surfaces feel grainy, tiny zebra mussels may be attached. If possible, these "hitchhiking" mussels should be scraped off. Thoroughly flush hulls, outdrive units, live wells (and pumping systems), bilge, trailer frames, anchors and anchor ropes, bait buckets, raw water engine cooling systems, and other boat parts and accessories that typically get wet. When rinsing these parts use water that is 140°F or hotter. A pressurized steam cleaner or high pressure power washer is very effective to rinse parts quickly. After rinsing, allow boats and trailers to dry in the sun before transporting them other waterways. If you are entering another waterway via the water, try to avoid leaving your outdrive in the down position. Hulls and drive units should be inspected regularly, as zebra mussels can attach and cover water intakes leading to clogging, engine overheating, and damage to cooling system parts. For more information on how to stop the spread of zebra mussels please visit **www.seagrant.wisc.edu/zebramussels/help_stop.html.**

## HOW CAN I HELP STOP THE SPREAD OF INVASIVE SPECIES?

**Wisconsin law prohibits launching a boat or placing a trailer or boat equipment in navigable waters if it has invasive aquatic plants or zebra mussels attached. The main way Eurasian water-milfoil is moved between water bodies by small fragments transported on recreational equipment. It is commonly transported by boats, trailers, bait buckets, live wells, and fishing equipment. To help prevent the spread of Eurasian water-milfoil and other invasive species, please take the following steps.**

- ☑ Inspect and remove any visible mud, plants, fish or animals before transporting.
- ☑ Drain water from equipment (e.g., boat, motor, trailer, live wells, etc.) before transporting.
- ☑ Dispose of unwanted live bait in the trash.
- ☑ Ensure that all boat landings on your lake are posted with Eurasian water-milfoil signs that describe the plant and instruct boaters to remove all plant fragments from their boats and trailers before launching.
- ☑ Help establish a plant disposal station at boat landings for plant fragments that are removed from water craft.
- ☑ Learn to easily recognize Eurasian water-milfoil. Monitor boat landings, marinas, and inlets on a regular basis for the first sign of an invasion. Report new sightings to your nearest Wisconsin DNR office.
- ☑ Work with your local lake association to develop an aquatic plant management program for your lake including contingency plans in case Eurasian water-milfoil is found in the lake.
- ☑ Help others understand the benefits of native plants and use discretion in their control.

# What if?...

## Frequently Asked Questions

**Q: What if I get to the post office too late on Thursday afternoon and they are closed. What should I do with my samples?**

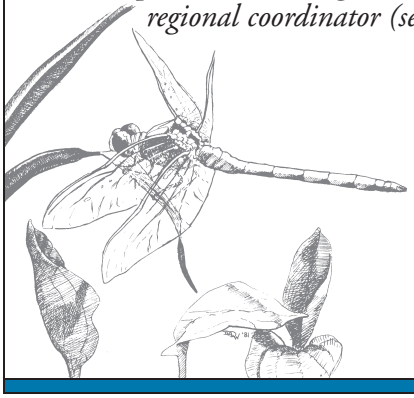
**A:** *It's okay! Just unpack your box, put the chlorophyll sample in the freezer and phosphorus sample in the refrigerator until Monday. Dispose of the ice and re-package again on Monday.*

**Q: What if I get to the post office and I have not put the pre-paid merchandise return label on the package?**

**A:** *The best option is to return home and get the label for the package. Very few WDNR offices have petty cash available to refund the cost of shipping. If you pay for the cost of shipping yourself, it may be difficult to be reimbursed.*

**Q: What if I test my phosphorus sample with the pH paper and the pH is greater than 2?**

**A:** *Check to make sure that you added one vial of sulfuric acid ($H_2SO_4$) to your sample. If you have not, add 1 vial of $H_2SO_4$ to your sample, mix, and then test the pH again with a new strip of litmus paper. If the pH is still greater than 2, add a second vial of $H_2SO_4$ to your sample, mix, and test again with a new strip of litmus paper. If the pH of your sample is still 2.5 or greater, contact your regional coordinator (see page iii).*



**Q: What if my Van Dorn water sampler breaks while I am collecting water samples.**

**A:** *Unfortunately, these types of water samplers seem to break when it is the most inconvenient. If you are unable to make a repair on the spot, you will need to contact your regional coordinator and make arrangements for a new sampler. If you are unable to complete that sampling session, just record the information that you have and make a note of what happened.*

**Q: What if I don't receive a Styrofoam® mailer back from the State Laboratory of Hygiene before I am ready to collect my next sample?**

**A:** *If you need a mailer, call (800) 442-4618 at least one week before you plan to take your next sample. This toll-free number is a general number for the State Laboratory of Hygiene. Ask them to transfer you to the shipping department to request a new mailer.*

**Q: What if the water in the magnetic filter cup isn't filtering through the filter? It seems like I have been using the hand pump for a long time and nothing is happening.**

**A:** *First, check to make sure that you have a good seal between the rubber stopper and the flask. Sometimes it helps to press down on the rubber stopper to make sure that it is in the flask as far as it will go. Check the clear tubing; is there a good connection between the flask and the hand pump? If your equipment is not the problem, you may have a lot of algae, sediment, or other material in your water that is making it hard to filter. If you are able, filter the remaining water in the filter cup, remove the filter and record just the amount that you were able to filter. Another option is to transfer the remaining water to your empty graduated cylinder, remove the first filter and place it in the mailing tube. Put another filter on the base and filter the remaining water in the cylinder. Both filters can be placed in the tube and mailed to the State Laboratory of Hygiene.*